# Ph.D. Statistician (Scientist 2/3) Statistical Sciences Group Los Alamos National Laboratory http://www.lanl.gov

Located in northern New Mexico, Los Alamos National Laboratory (LANL) is a multidisciplinary research institution engaged in strategic science on behalf of national security. LANL enhances national security by ensuring the safety and reliability of the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction, and solving problems related to energy, environment, infrastructure, health, and global concerns.

The Statistical Sciences Group was formed in 1967 to provide the Laboratory with a center of expertise in Statistics. The group consists of 21 statistical scientists plus supporting personnel, visiting faculty, students, and postdoctoral research associates. The group currently has expertise in a range of methodologies including Bayesian methods, uncertainty quantification of computer models, design and analysis of experiments, Monte Carlo and computer-intensive methods, reliability, sample planning, spatial modeling, statistical computation, statistical graphics and visualization, and analysis of measurement systems.

Statisticians work in partnership with world-class scientists to develop and apply basic science and technology in areas such as computational science, materials science, physics, energy, geology, climate, astronomy, biology, and chemistry. In addition to questions of national security and nuclear safety and reliability, applications come from other government agencies and industrial partners. Supercomputing and simulation play a large and growing role in many of these disciplines and applications. The group's work involves development and application of statistical methodology to the scientific questions in these fields, often with a strong focus on computation. The group encourages members to publish and present their work to the wider statistical community.

The Statistical Sciences Group at Los Alamos National Laboratory seeks excellent candidates for challenging careers in Statistics. Successful candidates have experience developing statistical methodology motivated by multidisciplinary collaborations and proven statistical research ability as evidenced by journal publications, technical reports, and/or conference presentations. Verbal and written communication skills for collaboration with scientists in other disciplines are critical.

Los Alamos sits at 7300 feet on the colorful mesas that extend from the slopes of the Jemez Mountains. The town of about 18,000 people overlooks the Rio Grande Valley with further views of the Sangre de Cristo range, which forms the southern end of the Rocky Mountains. Los Alamos is a scenic 40-minute drive

from the historic and cultural center of Santa Fe. The Los Alamos area boasts unparalleled access to outdoor activities such as skiing, fishing, mountain biking, and hiking.

## Job Description

#### Statistician (Scientist 2/3)

This position will be filled at either the Scientist 2 or 3 Level, which spans junior to midcareer opportunities, depending on the skills of the selected candidate. Additional job responsibilities (outlined below) will be assigned if the candidate is hired at the higher level.

### Scientist 2 (\$79,600-\$133,100)

Duties for a Scientist 2 level position include:

- Applying a variety of statistical methods in multiple application areas in a collaborative scientific environment
- Formulating statistical problems to address the needs of a scientific investigation
- Developing approaches for nonstandard statistical problems
- Carrying out advanced statistical analyses
- Statistical computation required for data planning and analysis, as well as methodological development
- Publication of results of research and applied work

#### Scientist 3 (\$86,400-148,200)

In addition to all the duties of Scientist 2:

- Work with limited direction to provide statistical solutions to complex problems
- Lead statistical research initiatives and collaborations
- Contribute to research proposals and new collaborations to develop future funding streams: this will require interacting with people in other teams, groups, division, directorates, and programs to create collaborations
- Provide direction and mentor junior scientists and students

#### **Minimum Job Requirements:**

- Ph.D. in Statistics
- Applicant must possess knowledge of multiple areas of statistical sciences
- Demonstrated willingness and ability to work in a collaborative, multidisciplinary scientific environment and contribute to diverse application areas

- Ability to carry out statistical research and advanced statistical analyses
- Ability to communicate technical results to both statistical and nonstatistical audiences
- Experience in developing and implementing statistical models
- Strong statistical computing skills including experience using software for statistical programming and advanced statistical analysis (e.g. R, Matlab), and familiarity with a scientific computing language (e.g. C/C++, Fortran, Python, Java)

#### **Additional Job Requirements for Scientist 3:**

In addition to the Job Requirements outlined above, qualification at the Scientist 3 level requires:

- Leadership of advanced development and application of statistical methods
- Proven statistical research record as evidenced by journal publications and technical reports
- Demonstrated record of presenting research results in scientific settings
- Experience in developing and applying advanced statistical methods
- Experience working on interdisciplinary scientific problems

#### **Desired Skills:**

- Experience with statistical applications in the physical and engineering sciences is a plus.

**Clearance: Q** (Position will be cleared to this level). Applicants selected will be subject to a Federal background investigation and must meet eligibility requirements\* for access to classified information.

\*Eligibility requirements: To obtain a clearance, an individual must be at least 18 years of age; U.S. citizenship is required except in very limited circumstances. See DOE Order 472.2 for additional information.

To apply for this position, an electronic application must be submitted, including a cover letter addressing each of the minimum job requirements and a CV or resume. Go to <a href="http://www.lanl.gov/careers/career-options/jobs">http://www.lanl.gov/careers/career-options/jobs</a>, click on All Jobs, and search for Vacancy Name IRC36637. Response prior to January 6, 2015 is strongly encouraged. Los Alamos National Laboratory is an equal opportunity employer and supports a diverse and inclusive workforce. The Laboratory offers a competitive salary and benefits package. Questions regarding this application process may be sent to <a href="statsearch@lanl.gov">statsearch@lanl.gov</a>.